

CLAIM AMENDMENTS

Please replace the pending claims with the following claim listing:

1. (Currently Amended) An optical medium ~~consists-of comprising~~ a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material [[is]] ~~comprising~~ $\alpha\beta\text{O}_3$, where α is at least one of K, Ba, Sr, Ca, and β is at least one of Ta, Ti.
2. (Currently Amended) An optical medium ~~consists-of comprising~~ a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material [[is]] ~~comprises~~ KTaO_{3-d} , where the amount of oxygen deficiency d is $0 \leq d < 10^{-7}$.
3. (Currently Amended) An optical medium ~~consists-of comprising~~ a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material [[is]] ~~comprises~~ $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.
4. (Currently Amended) An optical medium ~~consists-of comprising~~ a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material [[is]] ~~comprises~~ $\text{K}_{1-y}\text{Li}_y\text{TaO}_3$, where composition y is $0 \leq y \leq 0.02$.
5. (Currently Amended) An optical medium ~~consists-of comprising~~ a cubic crystal material, ~~said optical medium being characterized in that:~~ said crystal material [[is]] ~~comprises~~ $\text{K}_{1-y}\text{Li}_y\text{Ta}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$ and y is $0 \leq y \leq 0.02$.

6. (Currently Amended) An optical lens characterized by comprising:
a cubic crystal material consisting of comprising $\alpha\beta\text{O}_3$, where α is at least one of
K, Ba, Sr, Ca, and β is at least one of Ta, Ti; and
a refractive index of more than 2.2 in the wavelength range of 360nm-800nm, and
a transmission of 80% or more with a 10mm thickness.
7. (Currently Amended) An optical lens according to Claim 6, wherein said cubic
crystal [[is]] comprises KTaO_{3-d} , where the amount of oxygen deficiency d is $0 \leq d < 10^{-7}$.
8. (Currently Amended) An optical lens according to Claim 6, wherein said cubic
crystal [[is]] comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.
9. (Currently Amended) An optical lens according to Claim 6, wherein said cubic
crystal [[is]] comprises $\text{K}_{1-y}\text{Li}_y\text{TaO}_3$, where composition y is $0 \leq y \leq 0.02$.
10. (Currently Amended) An optical lens according to Claim 6, wherein said cubic
crystal [[is]] comprises $\text{K}_{1-y}\text{Li}_y\text{Ta}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$ and y is $0 \leq y \leq 0.02$.

11. (Currently Amended) An optical prism characterized by comprising:
a cubic crystal material consisting of comprising $\alpha\beta\text{O}_3$, where α is at least one of
K, Ba, Sr, Ca, and β is at least one of Ta, Ti; and
a refractive index of more than 2.2 in the wavelength range of 360nm-800nm, and
a transmission deterioration of 1% or less under a 10-minute irradiation with an
irradiation intensity of 2.2W/cm^2 .

12. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal
[[is]] comprises $\text{KTa}_{3-d}\text{O}_3$, where the amount of oxygen deficiency d is $0 \leq d < 10^{-7}$.

13. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal
[[is]] comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.

14. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal
[[is]] comprises $\text{K}_{1-y}\text{Li}_y\text{TaO}_3$, where composition y is $0 \leq y \leq 0.02$.

15. (Currently Amended) A prism according to Claim 11, wherein said cubic crystal
[[is]] comprises $\text{KTa}_{1-x}\text{Nb}_x\text{O}_3$, where composition x is $0 \leq x \leq 0.35$.